

Kentucky Rural Behavioral Health  
Pilot Project: Connecting behavioral  
health providers with primary care  
and specialty care using 21<sup>st</sup> Century  
Technology

An application to:

**The Federal Communication Commission's Pilot Program  
For Enhanced Access to Advanced  
Telecommunications and Information Services Health  
Care Support Mechanism,  
WC Docket No. 02-60, Order (rel. Sep. 29, 2006); Order  
on Reconsideration (rel. Feb. 6, 2007).**

**By**

**Kentucky River Community Care, Inc. for the  
Kentucky Behavioral Telehealth Network**



**Kentucky Rural Behavioral Health Pilot Project: Connecting behavioral health providers with primary care and specialty care using 21<sup>st</sup> Century Technology**

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**Introduction:**

Resources are scarce in rural Kentucky, which is in the heart of the Appalachian poverty belt. While high illiteracy rates, low economic opportunity, poor health, and feelings of hopelessness exist in many communities all over the USA, the intricate blending of these forces forms a particularly potent extreme in rural Kentucky making most of these counties among the most economically distressed nationally. A recent upsurge in mental health, chronic diseases and drug abuse is overwhelming local resources and challenging helping professional to find innovative and evidence based solutions to complex social and health problems. Toward this end comes Kentucky River Community Care (KRCC), the applicant agency under this partnership. KRCC is the leading innovator in the delivery of behavioral health services in rural Kentucky and a pioneer in integrating health and behavioral health services through using technology.

Increasing the complexity of the area's behavioral health problems are rates of chronic diseases which are among the nations highest. Individuals with co-occurring medical and behavioral health disorders often have limited support networks and consequently tax the local community care system. This proposal is drafted and submitted with the belief that individuals and communities can effect systems changes through an evidence based culturally competent partnership between local government, local citizens,



the local community mental health and hospital systems, the state university health care systems and federal technology resources.

Because of the long history of back breaking labor such as logging, mining, tobacco production, and whiskey production; rural Kentucky has become a national shame in many chronic disease categories such as diabetes, heart disease, smoking, chronic obstructive pulmonary disease, lung cancer, and numerous behavioral health disorders. Hepatitis, tuberculosis, and sexually transmitted diseases are common among persons in Kentucky who are intravenous drug users. According to the Substance Abuse and Mental Health Services Administration, rural Kentucky has the highest drug abuse and psychological distress rates in the nation as well as the highest death rates for many cancers such as lung cancer.

While the 28 partners named in this application have great expertise in providing healthcare services, developing a successful behavioral telehealth project will require additional planning, engineering and design consultation for it to be successful. For this reason this project plans to spend the first year planning and designing the telehealth network with the creation and implementation of the network coming in year two. Development of detailed plans and specifications will make bidding for the network more successful and the installation and development of protocols, policies and procedures more complete. Final determination of the member partners will come at the end of the planning and business development plan creation when all members can see what they have to gain versus the return on investment and competing community needs.

The **Kentucky Behavioral Telehealth Network (KBTN)** partners will develop viable strategies make use of existing expertise nationally from such long term existing telehealth partnerships as the Northern Arizona Behavioral Health Authority. Through learning from and consulting with telehealth networks such as this, KBTN will be able to demonstrate a successful strategy to fully utilize a newly created dedicated broadband network to provide health care service.



- a. **Identify the organization that will be legally and financially responsible for the conduct of activities supported by the fund;**

**Kentucky River Community Care, Inc. (KRCC)** is a private, non-profit community mental health center providing behavioral health care and housing services to southeast Kentucky. KRCC is a comprehensive community mental health center providing a full array of mental health, mental retardation and substance abuse services. KRCC is the designated regional agency for mental health and substance abuse services for the eight county Kentucky River region and the designated local authority for mental health and substance abuse planning in the Kentucky River Region under Kentucky law. KRCC has 45 service locations spread over an eight county area in southeast Kentucky. Through its staff of over 450 persons, KRCC provides psychiatric services through its five full time psychiatrists, long term personal care services through its 80 bed Caney Creek Rehabilitation Complex, crisis stabilization services through the Bailey Center 8 bed crisis stabilization unit, medical and social detox services through the Next Step residential treatment program for substance abusers; outpatient services through its array of 8 community outpatient clinics with substance abuse and mental health staff, case management services through its fifteen mental health case managers and therapeutic rehabilitation day treatment programs through its array of five day treatment centers, crisis services throughout 24 hour crisis hot line and Turning Point Crisis Center, specialized services for women victims of rape and sexual assault through the Care Cottage sexual assault center and Project Advance women's program for women entering the workforce after having a history of domestic violence and substance abuse. Please see the KRCC web site at [KRCCNET.com](http://KRCCNET.com).

KRCC has been a licensed substance abuse, mental health and mental retardation services provider for over 30 years. During that time it has grown to have an annual budget of over \$25 million per year with a complete infrastructure to support an agency of its size and complexity. Along with the various mental health, housing, mental retardation, rape crisis, substance abuse, crisis services direct service provision departments, KRCC also has Departments of Human Resources, Management



Information Systems, Quality Assurance, Medical Records, Facilities, and Administrative Services. Through this comprehensive array of functions and services, KRCC is able to assure high quality and fiscally sound management practices. Through the Kentucky Office of the Inspector General there are frequent inspections and audits because of the multiple licenses held by KRCC. In addition there are frequent programmatic reviews and site visits by the Kentucky Department of Mental Health and Mental Retardation Services and the Division of Substance Abuse. KRCC has been the recipients of past CSAT, CMHS, HRSA, Robert Wood Johnson Foundation, American Legacy Foundation, Appalachian Regional Commission, CSAP, and many other federal and national grants.

**b. Identify the goals and objectives of the proposed network;**

The mission of Kentucky Behavioral Telehealth Network is to improve the quality of life for individuals and families across Kentucky who are eligible for privately funded, state and federally funded behavioral health services.

KBTN carries out this mission by developing and managing a progressive, innovative, and fiscally responsible network of behavioral health providers.

KBTN strives to ensure services delivered within the system are accessible, timely, appropriate, efficient, respectful, and caring.

**Goal 1:** Carefully plan a Kentucky statewide rural health care network that links the existing statewide network of regional behavioral health providers with primary medical care providers and hospitals to improve access to a full range of medical care for persons with co-morbid medical conditions.

**Objective 1.1:** Develop plan for the creation of the KBTN by using planning consultants and fulltime project staff to identify strengths, weaknesses, opportunities and threats to a statewide partnership with health care, hospitals and behavioral health organizations.



**Objective 1.2:** Combine Network of Providers into a non-profit consortium to be known as Kentucky Behavioral Health Network modeled after similar successful networks.

**Objective 1.3** Contract with experienced behavioral telehealth consultants to learn about protocols and procedure.

**Objective 1.4** Issue RFP for design engineers and telecommunications providers.

**Goal 2:** Design a Kentucky statewide rural telehealth network that makes use of existing capacity, in place resources and technology combined with the best of new technologies using a design team of highly qualified consulting systems and telecommunications engineers.

**Objective 2.1:** Select and contract with a network design firm with special expertise in telehealth network design strategies.

**Objective 2.2:** Using planning, systems improvement, telecommunications engineering, site visits and group process techniques work with KBTN partners on system design specifications.

**Objective 2.3** Develop contract requirements for broadband network services and solicit bids from vendors.

**Objective 2.4** Enter into contracts for the acquisition, creation and installation, implementation of telehealth infrastructure and training to partners on telehealth system maintenance and use.

**Goal 3:** Establish a statewide telehealth network of behavioral health care providers linking them to each other, primary medical care, and specialty medical care resources through the national Internet2 network for the benefit of those rural areas medically underserved.

**Objective 3.1:** Using design specifications and information from the strategic plan establish formal agreements, procedures, policies and protocols on the KBTN implementation.

**Objective 3.2:** Combine Network of Providers into a non-profit consortium

**Objective 3.3:** Use the KBTN to provide telehealth behavioral health services to at least 500 persons per month.



**Objective 3.4:** Use the KBTN to provide telehealth primary and specialty medical care health services to at least 500 persons per month.

**Goal 4:** Implement, train and develop policies, procedures and clinical protocols that guarantee a swift adoption of the new technology as a resource to all members of the provider network.

**Objective 4.1:** Write and implement policies and procedures that guarantee swift adoption of KBTB network using those developed and tested at other nationally recognized sites.

**Objective 4.2:** Training providers on the use of the network so the access is simple and fast.

**Objective 4.3:** Maintain operational capacity of the network.

**Objective 4.4:** Devise clinical protocols to provide access to underserved rural areas as first priority for the KBTN.

**Goal 5:** Develop and Implement and plan for network self sufficiency and sustainability.

**Objective 5.1:** Develop plan for the evaluation of the strengths and weaknesses and patient and provider satisfaction for the KBTN.

**Objective 5.2:** Produce sustainability plan using projections and estimates of service volumes to partners for long term sustainability.

**Objective 5.3:** Produce network utilization reports on a monthly basis to provide feedback about implementation self sufficiency and sustainability.

**c. Estimate the network's total costs for each year;**

The final annual costs for the project can not be determined until the planning, design, participation and implementation phases are complete. A preliminary estimate is the first year's costs would be approximately \$300,000 and the second years cost would be approximately \$2,800,000 or \$100,000 per node. Final determination of the details of the costs would come after engineering and business plan development are complete. Any



un-utilized funds from the planning year might be used to begin broadband infrastructure creation.

**d. Describe how for-profit network participants will pay their fair share of the network costs;**

It is not currently anticipated that for-profit network participants will be a regular member of the Kentucky Behavioral Telehealth Network. The members partners already contract with for profit providers on a per unit of service basis or we will employ the necessary health care providers.

Each participant in the Kentucky Behavioral Health Telehealth network, whether for profit or non-profit will be invoiced for their 15% share based upon actual grant award amount and expenses incurred. Kentucky has passed a law permitting billing by psychiatric and advanced registered nurse practitioners to e reimbursement to private and public payers for telehealth services. The KBTN participants should be able to generate revenue by billing for the services provided over the network, thereby providing a resource for the funds for their 15% share expenses.

**e. Identify the source of financial support and anticipated revenues that will pay for costs not covered by the fund;**

A variety of financial supports will be available from member partners through sources such as Medicaid, state general revenue funds, state contract funds, receipts from insurance companies, and private pay receipts. Each of the named partners are long standing private non-profit corporations is government subdivision, or university subdivisions. Collectively there is great experience and expertise in the Kentucky health care industry.

The Northern Arizona Regional Behavioral Health Authority presently provides over 500 hours of services per month to its members and patients. At current reimbursement rates this would generate approximately \$100,000 per month in revenue. In Missouri, a state similar in size and



rural nature to Kentucky, the Missouri Telehealth Network provides services to over 2000 patients per year in fifteen different medical specialties.

The Kentucky consortium may also seek telecommunications cost assistance from the Rural Health Care Program of the Universal Service Fund (USF), which is administered by the Universal Service Administrative Company (USAC). This is a support program authorized by Congress and designed by the Federal Communications Commission (FCC) to provide reduced rates to rural health care providers (HCPs) for telecommunications services and Internet access charges related to the use of telemedicine & tele-health.

Existing resources include funding from the USDA, The Appalachian Regional Commission, the Kentucky Center for Rural Development, Centranet, and state of Kentucky general revenue funds.

**f. List the health care facilities that will be included in the network;**

The Kentucky Behavioral Telehealth Network links the statewide network of fourteen regional behavioral health care providers with an additional fourteen sites comprised of the major hospitals in the state. All of these facilities will be invited to participate and the final composition of the network will be determined by the individual provider agency's interest and willingness to make the contributions of time, human resources, financial commitment and interest in the mission of the Kentucky Behavioral Telehealth Network. The selection of the partners is based upon a long history of working together in Kentucky and the derived benefits of being able to plan and execute behavioral health and physical health care services as a combined entity.

Kentucky River Community Care Inc
Appalachian Regional Healthcare Hospital, Hazard Kentucky
Appalachian Regional Healthcare, Whitesburg, Kentucky
Kentucky River Medical Center



Mary Breckinridge Hospital
University of Kentucky Hospital
Eastern State Hospital
Western State Hospital
Central State Hospital
Chrysalis House
Bluegrass Mental Health Mental Retardation Board
Cumberland River Mental Health
Four Rivers Behavior Health
Pennyroyal Regional Center
River Valley Behavior Health
Lifeskills Inc
Communicare, Inc.
Seven Counties Services Inc
Northkey
Comprehend, Inc.
Pathways, Inc.
Mountain Comprehensive Community Care
Adanta
University of Louisville Medical Center
University of Kentucky Center for Rural Health

- g. Provide the address, zip code, Rural Urban Commuting Area (RUCA) code and phone number for each health care facility participating in the network;**

Anticipated KBTN provider partners:

<i>Facility Name</i>	<i>Address/Zip Code</i>	<i>RUC A</i>	<i>Phone Number</i>
Kentucky River Community Care Inc	PO Box 794 Jackson KY 41339	10	606-666-9006
Kentucky Association of Regional Programs	230 Lexington Green Circle Lexington KY 40503	1	859-272-6700
Appalachian Regional	102 Medical Center Drive	7	606-439-6713



Healthcare	Hazard KY 41701		
Appalachian Regional Healthcare	240 Hospital Road Whitesburg KY 41858	10	606-633-3500
Kentucky River Medical Center	540 Jett Drive Jackson KY 41339	10	606-666-6000
Mary Breckinridge Hospital	130 Kate Ireland Dr. Hyden KY 41749	10	606-672-2901
University of Kentucky Hospital	800 Rose Street Lexington KY 40536-0084	1	859-323-5000
Eastern State Hospital	627 West Fourth St. Lexington KY 40508	1	859-246-7000
Western State Hospital	PO Box 2200 Hopkinsville, KY 42241-2200	4	270-889-6025
Central State Hospital	10510 LaGrange Rd Louisville, KY 40223-1228	1	502-253-7060
Chrysalis House	1589 Hill Rise Dr. Lexington KY 40504	1	859-977-2502
Cabinet for Family Health Services	275 East Main St. Frankfort, KY 40621	4	800-372-2973
Department of Mental Health & Mental Retardation	100 Fair Oaks Lane 4E-D Frankfort KY 40621	4	502-564-4456
Bluegrass Mental Health Mental Retardation Board	1351 Newtown Pike Lexington KY 40511	1	859-253-1686
Cumberland River Mental Health	PO Box 568 Corbin KY 40702	7	606-528-7010
Four Rivers Behavior Health	425 Broadway Suite 201 Paducah KY 42001	4	270-442-1452
Pennyroyal Regional Center	PO Box 614 Hopkinsville KY 42241-0614	4	270-886-2205
River Valley Behavior Health	PO Box 1637 Owensboro KY 42302-1637	1	270-689-6500
Lifeskills, Inc	PO Box 6499 Bowling Green KY 42102-6499	4	270-901-5000
Communicare, Inc.	107 Cranes Roost Ct. Elizabethtown KY 42701	4	270-765-2605
Seven Counties Services Inc	101 W Muhammed Ali Blvd. Louisville KY 40202	1	502-589-8600
Northkey	PO Box 2680 Covington KY 41011	1	859-578-3252
Comprehend, Inc.	611 Forest Avenue Maysville KY 41056	7	606-564-4016
Pathways, Inc.	PO Box 790 Ashland KY 41101	1	606-329-8588
Mountain	150 South Front Avenue	10	606-886-8572



Comprehensive Community Care	Prestonsburg KY 41653		
Adanta	259 Parkers Mill Road Somerset KY 42501	4	606-679-4782
University of Louisville Medical Center	530 South Jackson Street Louisville KY 40202	1	502-562-3000
University of Kentucky Center for Rural Health	750 Morton Blvd Hazard KY 41701	10	800-851-7512

**h. Indicate previous experience in developing and managing telemedicine programs;**

Kentucky River Community Care, Inc. has been involved in seven previous projects to increase video, data and telecommunications capability in its services region. While just over 30 years old as a behavioral health authority and provider, KRCC has developed the reputation and expertise as an innovator in the provision of services and the development and use of technology. The Robert Wood Johnson Foundation has selected Kentucky River Community Care as the only agency in Kentucky to receive two awards for process improvement in partnership with the University of Wisconsin Department of Industrial Engineering. Using these engineering consultants as coaches and mentors KRCC staff have improved systems operations and technical capacity.

Prior experience with data, video and telehealth networks includes 1) Partner with ARH network, 2) Webcam based telehealth services using Internet based web meetings such as Webex and Megameeting, 3) Cisco voice over IP video phone system, 4) Local Area Networks at dozens of locations using Windows, Novell, Citrix, and other networking technologies, 5) KRCC WAN data, voice, video networks, 6) Centranet host sites, and 7) St. Clare Medical Telehealth Network

**ARH/KRCC Telehealth partnership** – Beginning in 1998 KRCC, Appalachian Regional Health Care, Mountain Comprehensive Care and Cumberland River Comprehensive Care entered into an agreement and established a telehealth network. The ARH/KRCC network become active in 1999 and has operated continuously linking five sites in eastern



Kentucky. Now after almost a decade of use, the technology is becoming dated and unreliable resulting in declining use.

**Webcams and Telehealth** - Since the demand for access to telehealth services is so great we began using Internet based video services with Megameeting and webcams attached to computers in 2006. Although clients and staff enjoy using this technology, the service is unreliable, lower quality and can be difficult to use.

**Cisco VOIP videophone system** - In 2002 KRCC installed a state of the art Cisco VOIP phone system using part of the capacity on the T1 network KRCC has linking most of its major sites in the eight county region. There are over 300 Cisco VOIP phones in use with dozens also connected to a local PC and webcam. Most of the staff prefers this easy and instantaneous method of Telehealth Services. Since we began providing Telehealth Services in this manner in 2006 over 100 persons has accessed the system for Psychiatric services by a staff MD or Advanced Registered Nurse Practitioner. Client and staff surveys have revealed high satisfaction with this approach. KBTN could use this as a model for expanded behavioral health services.

**Local Area Networks** - Since KRCC has nearly 500 staff in over 45 locations each of these sites has a LAN which also has Internet access. KRCC has an IT staff of 5 IT professionals who provide support and assistance to the users. Additional staff would need to be added to manage the KBTN project and provide the needed support.

**KRCC WAN** – The KRCC eight county service system and many of the 45 KRCC locations are connected by a wide area network using a combination of T1 lines and other available ISDN lines. Broadband services and ISP is provided by a variety of telecommunications companies since no single company services all KRCC locations. Combined there are over 300 workstations on this network many with Telehealth capacity using the Cisco technology described above.

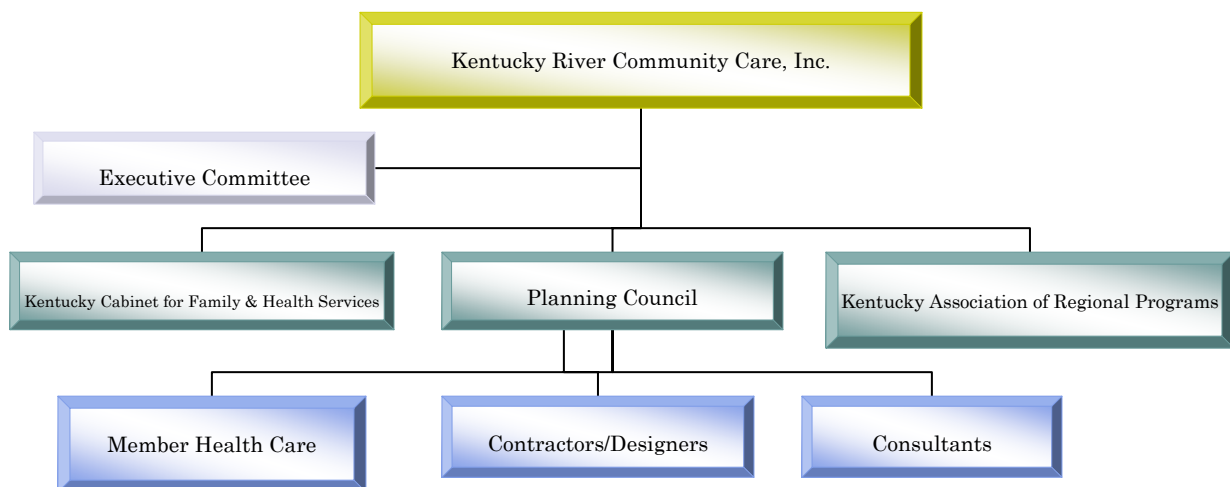


**Centranet Sites** - KRCC became a partner of the Kentucky Center for Rural Health in 2000 and became the host for Centranet sites in Wolfe and Lee Counties. Centranet was a project to provide free community Internet access to every county in the fifth congressional district.

**St. Clare Medical Telehealth Network** – KRCC became a partner in the St. Clare network during 2006. In 2007 the lines and the equipment began to be installed to two KRCC outpatient clinic offices. The telehealth system should become operational before the end of 2007.

**RWJF Technology Change Team** - Through grants from the Robert Wood Johnson Foundation KRCC has established a Technology change team partnership comprised of several of the members of the KBTN. The Technology change team has focused upon using Telehealth technology for providing additional access to the citizens of Kentucky. This application has its roots in the creation of the Technology Change Team and KBTN.

- i. **Provide a project management plan outlining the project's leadership and management structure, as well as its work plan, schedule, and budget.**





Leadership: The Leadership for the creation of the KBTN will come from the lead applicant and recipient of the Pilot Project grant, Kentucky River Community Care, Inc. (KRCC). The KRCC Executive Director, Dr. Louise Howell, will invite participation in the Planning Committee from all potential network participants. Based upon the early Planning process, memoranda of agreement and roles and responsibilities of members will be established. An Executive Committee made up of five project leaders will be the key decision making body for the KBTN and accomplish its activities through Project Staff, consultants and vendors.

Management Structure:

#### KBTN Work Plan:

	Objective	Activities	Responsibilities	Scheduled Date Due
<b>Goal 1:</b> Carefully plan a Kentucky statewide rural health care network that links the existing statewide network of regional behavioral health providers with primary medical care providers and hospitals to improve access to a full range of medical care for persons with co-morbid medical conditions.				
	Objective	Activities	Responsibilities	Scheduled Date Due
	<b>Objective 1.1:</b> Develop plan for the creation of the KBTN by using planning consultants and fulltime project staff to identify strengths, weaknesses, opportunities and threats to a statewide partnership with health care, hospitals and behavioral health organizations.	Advertise and select consultants.	KRCC	Month One
	<b>Objective 1.2:</b> Combine Network of Providers into a	Advertise and select	KRCC & KARP	Months 2 - 4



non-profit consortium to be known as Kentucky Behavioral Health Network modeled after similar successful networks.		partners		
<b>Objective 1.3:</b> Contract with experienced behavioral telehealth consultants to learn about protocols and procedure.		Advertise and select telehealth consultants	Planning Committee	Months 2 - 4
<b>Objective 1.4:</b> Issue RFP for design engineers and telecommunications providers.		Write and advertise RFP	Planning Committee & Project Staff	Months 4 - 6
<b>Goal 2:</b> Design a Kentucky statewide rural telehealth network that makes use of existing capacity, in place resources and technology combined with the best of new technologies using a design team of highly qualified consulting systems and telecommunications engineers.				
	Objective	Activities	Responsibilities	Schedule d Date Due
<b>Objective 2.1:</b> Select and contract with a network design firm with special expertise in telehealth network design strategies.		Advertise and select telehealth design firm	Planning Committee & Project Staff	Month 6
<b>Objective 2.2:</b> Using planning, systems improvement, telecommunications engineering, site visits and group process techniques work with KBTN partners on system design specifications.		Develop specifications for network	Network design engineers	Months 7-10
<b>Objective 2.3:</b> Develop contract requirements for broadband network services and solicit bids from vendors.		Develop specifications for network	Network design engineers	Months 7-10
<b>Objective 2.4:</b> Enter into		Create and sign	KRCC and	Months



contracts for the acquisition, creation and installation, implementation of telehealth infrastructure and training to partners on telehealth system maintenance and use.	contracts, install and implement technology use	Executive Committee and Project staff	11-12	
<b>Goal 3:</b> Establish a statewide telehealth network of behavioral health care providers linking them to each other, primary medical care, and specialty medical care resources through the national Internet2 network for the benefit of those rural areas medically underserved.				
	Objective	Activities	Responsibilities	Schedule d Date Due
<b>Objective 3.1:</b> Using design specifications and information from the strategic plan establish formal agreements, procedures, policies and protocols on the KBTN implementation.	Consultations and MOA's	Project Staff	Month 10-13	
<b>Objective 3.2:</b> Combine Network of Providers into a non-profit consortium	Legal consultation	Project Staff	Month 12-13	
<b>Objective 3.3:</b> Use the KBTN to provide telehealth behavioral health training services to at least 50 providers.	Telehealth Consultants and vendors hold training sessions	Project Staff plan, facilitate and coordinate	Months 14-16	
<b>Objective 3.4:</b> Use the KBTN to provide telehealth primary and specialty medical care health services to at least 500 persons per month.	Telehealth providers commence access to services	Project Staff plan, facilitate and coordinate	Months 16-24	
<b>Goal 4:</b> Implement, train and develop policies, procedures and clinical protocols that guarantee a swift adoption of the new technology as a resource to all members of the provider network.				



	Objective	Activities	Responsibilities	Schedule d Date Due
	<b><u>Objective 4.1:</u></b> Write and implement policies and procedures that guarantee swift adoption of KBTN network using those developed and tested at other nationally recognized sites.	Consult with established telehealth companies and legal staff	Planning and Project Staff	Months 12 -16
	<b><u>Objective 4.2:</u></b> Training providers on the use of the network so the access is simple and fast.	Hold demonstration of various therapies and diagnostic groups	Vendors, consultants and Project Staff	Ongoing
	<b><u>Objective 4.3:</u></b> Maintain operational capacity of the network.	24 hour monitoring and operation capacity analyzed	Maintenance contractors, broadband providers and Project Staff	Ongoing
	<b><u>Objective 4.4:</u></b> Devise clinical protocols to provide access to underserved rural areas as first priority for the KBTN.	Adopt protocols for first services and expand as new services are added. Scheduling, credentials for use, access, and HIPAA requirements for informed consent established first	Planning Committee and Project Staff	Ongoing
<b><u>Goal 5:</u></b> Develop and Implement and plan for network self sufficiency and sustainability.				
	Objective	Activities	Responsibilities	Schedule



				d Date Due
<b><u>Objective 5.1:</u></b> Develop plan for the evaluation of the strengths and weaknesses and patient and provider satisfaction for the KBTN.	Survey staff, providers, services recipients	Executive Committee and Project Staff	Due Month 22	
<b><u>Objective 5.2:</u></b> Produce sustainability plan using projections and estimates of service volumes to partners for long term sustainability.	Develop plans using service data and operating expenses	Planning Committee and Project Staff	Month 16-24	
<b><u>Objective 5.3:</u></b> Produce network utilization reports on a monthly basis to provide feedback about implementation self sufficiency and sustainability.	Compile service data by provider and site	Project Staff	Month 16-24	



Budget Year One:

## KENTUCKY BEHAVIORAL TELEHEALTH NETWORK

### Budget – Year One

A. Personnel		Computation	Total Cost
Name/Position	Level of Effort	Base Salary	Year One
KBTN Project Coordinator	1	\$50,000.04	\$50,000
KBTN Project Assistant	1	\$29,250.00	\$29,250
Accountant	0.25	\$39,000.00	\$9,750
<b>Total</b>	<b>2.25</b>	<b>\$118,250.04</b>	<b>\$89,000</b>
<b>B. Fringe Benefits</b>			<b>Total Cost</b>
Name/Position		Computation	Year One
		30% of	
<b>Total Fringe (30%)</b>		Personnel	<b>\$26,700</b>
<b>C. Travel</b>			<b>Total Cost</b>
Purpose of Travel		Computation	Year One
In Region Travel	2 FTE's at 1000 miles per month each reimbursed at .35 cents per mile		\$8,400
Partner Travel	28 locations at 300 miles per month reimbursed at .35 cents per mile for 12 months		\$35,280
Site Visits	2 trips at 2,000 per trip for 10 people to Arizona and Missouri		\$40,000
<b>Total</b>			<b>\$83,680</b>
<b>D. Supplies</b>			<b>Total Cost</b>
	FTE	Computation	Year One
Supplies	2	\$500.00	\$1,000
Meeting Expenses		500 per mtg X 12 months	\$6,000
Training Materials		208 per mtg X 12 months	\$2,496



<b>Total</b>			<b>\$8,496</b>
<b>E. Consultants/Contracts</b>			<b>Total Cost</b>
<b>Name</b>	<b>Service Provided</b>	<b>Computation</b>	<b>Year One</b>
Systems Design & Engineering Firm		100,000	\$100,000
Project Development Facilitation		50,000	\$50,000
Northern Arizona Regional Behavioral Health Authority/KARP		50,000	\$50,000
<b>Total</b>			<b>\$150,000</b>
<b>F. Other Costs</b>			
<b>Description</b>	<b>Service</b>	<b>Computation</b>	<b>Year One</b>
		\$95 per mth	
Utilities		2 FTE	\$2,280
<b>Total</b>			<b>\$2,280</b>

<b>Budget Summary</b>		
<b>Budget Category</b>		<b>Amount</b>
A. Personnel		\$89,000
B. Fringe Benefits		\$26,700
C. Travel		\$83,680
D. Supplies		\$8,496
E. Consultants/Contracts		\$150,000
F. Other		\$2,280
<b>Total Project Costs</b>		<b>\$360,156</b>
<b>Federal Request</b>	<b>85%</b>	<b>306,133</b>
<b>Non-Federal Amount</b>	<b>15% match</b>	<b>54,023</b>

15% Match is from contributions and partner fees from KBTN members.

**Budget Year Two:**

<b>KENTUCKY BEHAVIORAL TELEHEALTH NETWORK</b>			
<b>Budget – Year Two</b>			
<b>A. Personnel</b>		<b>Computation</b>	<b>Total Cost</b>



Name/Position	Level of Effort	Base Salary	Year Two
KBTN Project Coordinator	1	\$51,500.04	\$51,500
KBTN Project Manager	1	\$39,000.00	\$39,000
KBTN Project Assistant	1	\$30,127.50	\$30,128
Accountant	0.5	\$39,000.00	\$19,500
<b>Total</b>	<b>3.5</b>	<b>\$159,627.54</b>	<b>\$140,128</b>
<b>B. Fringe Benefits</b>		<b>Computation</b>	<b>Total Cost Year Two</b>
<b>Total Fringe (30%)</b>		30% of Personnel Costs	<b>\$42,038</b>
<b>C. Travel</b>			<b>Total Cost</b>
<b>Purpose of Travel</b>		<b>Computation</b>	<b>Year Two</b>
In Region Travel	3 FTE's at 1000 miles per month each reimbursed at .35 cents per mile		\$12,600
	28 locations at 300 miles per month reimbursed at .35 cents per mile for 12 months		\$35,280
Partner Travel			
<b>Total</b>			<b>\$47,880</b>
<b>D. Supplies</b>			<b>Total Cost</b>
	<b>FTE</b>	<b>Computation</b>	<b>Year Two</b>
Supplies	3	\$500.00	\$1,500
Meeting Expenses		500 per meeting X 12 months	\$6,000
Training Materials		208 per meeting X 12	\$2,496
<b>Total</b>			<b>\$8,496</b>
<b>E. Consultants/Contracts</b>			<b>Total Cost</b>
	<b>Service</b>		
<b>Name</b>	<b>Provided</b>	<b>Computation</b>	<b>Year Two</b>
Engineering		148,000	\$148,000
<b>Total</b>			<b>\$148,000</b>
<b>F. Other Costs</b>			
<b>Description</b>		<b>Computation</b>	<b>Year Two</b>
Utilities		\$95 per month per office for 3 FTE's	\$3,420
Broadband Networks (fiber optic)		28 locations	\$1,000,000
Provider Training		28 sites @ 10,000 each	\$280,000



Ongoing Support/Maintenance	28 sites @ 10,000 each	\$280,000
<b>Total</b>		<b>\$1,563,420</b>
<b>H. Equipment</b>		
<b>Description</b>	<b>Computation</b>	<b>Year Two</b>
Initial Network Hardware & Setup	\$150,000.00	\$150,000
New Server Host Site	\$50,000.00	\$50,000
28 Remote Sites	28 sites @ 40,000 per site	\$800,000
Equipment Maintenance		
Contracts	\$50,000.00	\$50,000
<b>Total</b>		<b>\$1,050,000</b>
<b>Budget Summary</b>		
<b>Budget Category</b>		<b>Amount</b>
A. Personnel		\$140,128
B. Fringe Benefits		\$42,038
C. Travel		\$47,880
D. Supplies		\$8,496
E. Consultants/Contracts		\$148,000
F. Other		\$1,563,420
G. Equipment		\$1,050,000
<b>Total Project Costs</b>		<b>\$2,999,962</b>
<b>Federal Request</b>	<b>85%</b>	<b>2,549,968</b>
<b>Non-Federal Amount</b>	<b>15% match</b>	<b>449,994</b>
15% Match is from contributions and partner fees from KBTN members.		

10) Indicate how the telemedicine program will be coordinated throughout the state or region;

The management plan calls for the creation of an Executive Committee, full time management staff, a Planning Committee, regular meetings, a website and videoconferencing capabilities. While the initial planning and design meetings will need to take place face to face, on the long-term these face to



face meetings can be phased out and replaced with videoconferencing. Once established, one virtue of a statewide network with video-conferencing capabilities is the access that the member partners will have to participating in planning and coordination meeting without leaving their home base.

The lead agency, Kentucky River Community Care, Inc., will have Project Staff dedicated to the operation and management of the network. The Project Staff will develop contracts with vendors, follow FCC procurement and bidding requirements, create Memoranda of Agreement with partner agencies, and facilitate the completion of goals and objectives. KRCC will select and contract with consultants, vendors and contractors and using the Executive Committee and Planning Committee develop the deliverables, timeframes, and service agreements.

The KRCC Director of Information Services will play a key role in the overall selection and support of project staff, engineering and design consultants. The KRCC Adult Services Director will provide assistance in the coordination and systems design statewide and with clinical staff.

Consultation and Support Services will also be sought from exiting leaders in Telehealth such as the Northern Arizona Regional Behavioral Health Authority. Statewide coordination and consultation assistance will be provided through the Kentucky Association of Regional Programs, the Kentucky Department of Mental Health and Mental Retardation Services, and the Cabinet for Family and Health Services. Efforts will be made to have all key stakeholders involved through the Planning Committee or Executive Committee.

**11) Indicate to what extent the network can be self-sustaining once established.**

The key to the long term success of the KBTN is the initial planning, system design, membership selection and frequency of service provision using the network. The Kentucky Behavioral Health Network can likely be fully self sustaining because of the need for health and mental health care

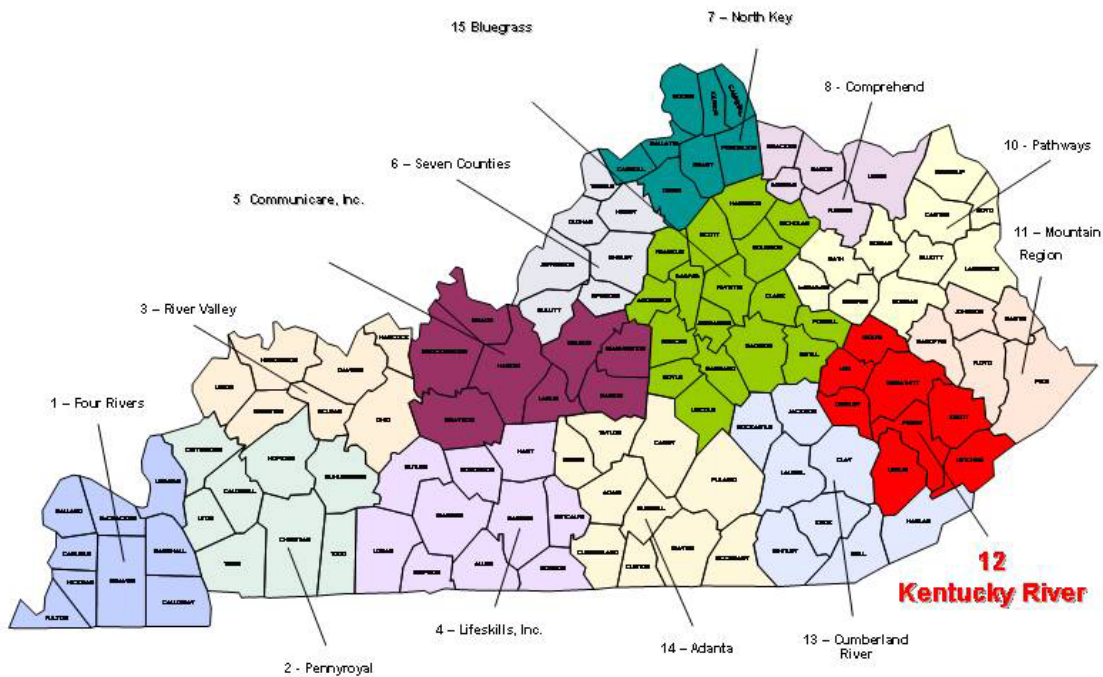


in rural areas of Kentucky, the possibility of billing for services provided over the network, and reduced rates for broadband services through FCC programs for rural service areas.

Extensive revenue capacity analysis will reveal if the network can be fully self sustaining once complete costs are known for ongoing training, maintenance, broadband service contracts, revenue sources and amounts and the utilization rates of patients and providers. Based upon the history of similar projects interest from the patients point of view is growing and provider willingness to access and provide services over such a system is growing. Calculations will be performed when more of the fixed costs and ongoing expenses are known will examine estimated monthly expenses for network, divided by number of network participants. Using business analytic models we will calculate costs based upon estimated number of hours of use for break even.

## Kentucky Behavioral Telehealth Network

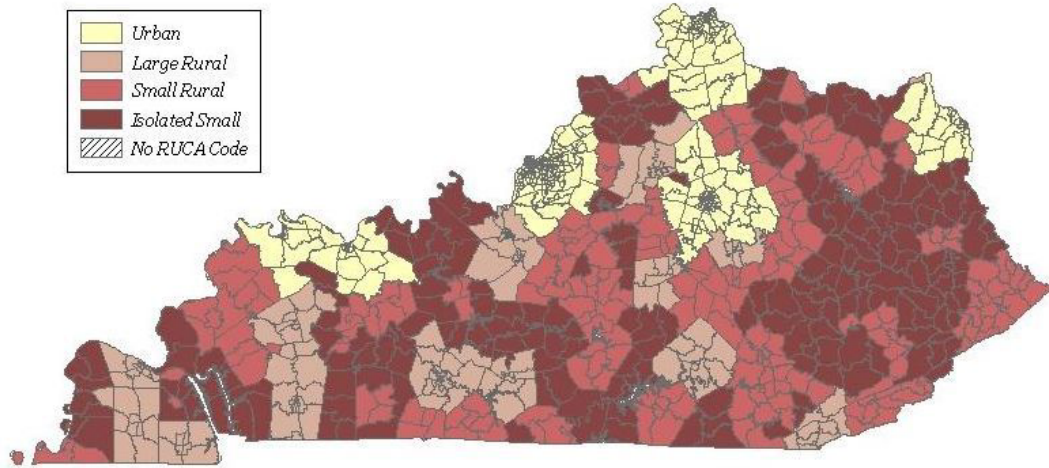
Regional Mental Health & Mental Retardation Districts



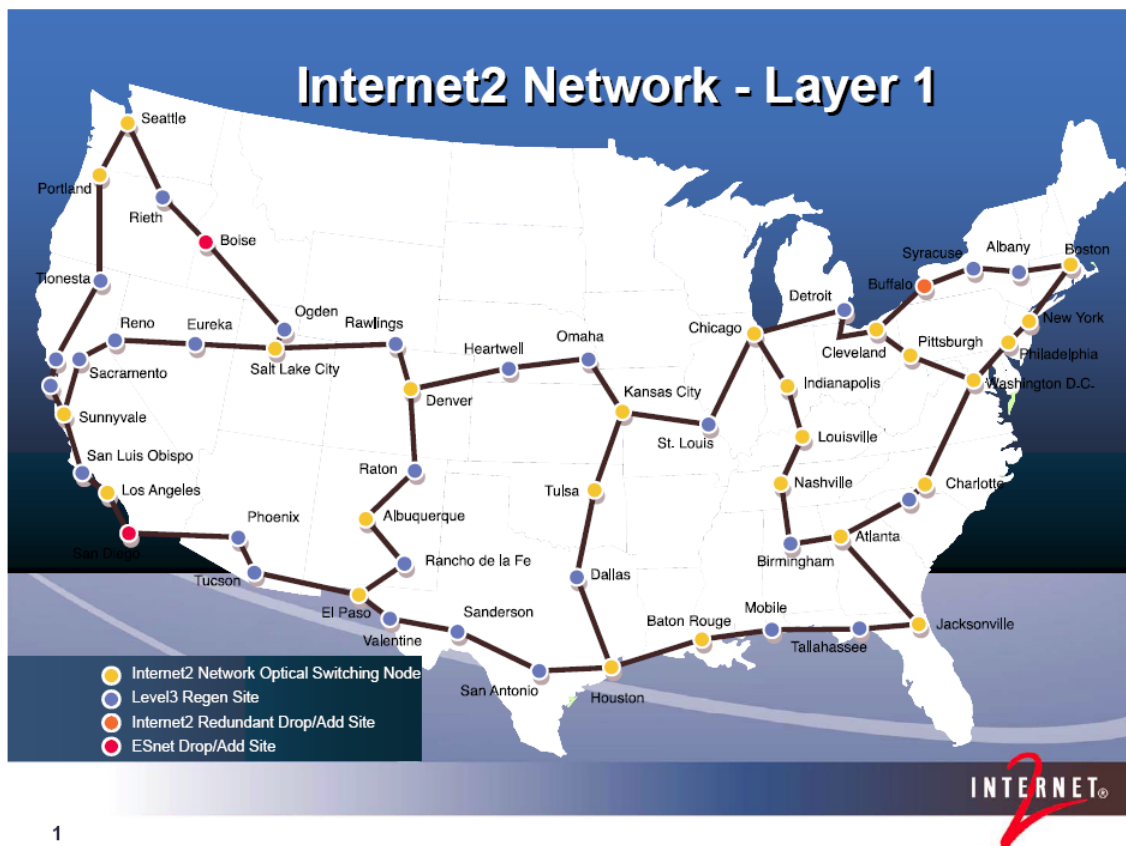


# Kentucky

Aggregated RUCA Designations by Census Tract



WWAMI Rural Health Research Center  
L. Gary Hart, Ph.D., Director  
University of Washington 2003





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